CLAIMS

Claims 1-20 previously canceled.

Please cancel claim 21 without prejudice.

Please add claims 22-39.

22.   (New)   A method of analyzing a subject, comprising the steps of:

administering a processing agent substance to a subject chosen from a human being, a plant and an animal, the processing agent having a primary behavior effective in combination with a processing system to achieve a desired process result, the processing agent further having a distinctive signature characteristic distinguishing it from other processing agents;

testing for the distinctive signature characteristic of the processing agent using a test functionality of the processing system;

selectively modifying subsequent operation of the processing system based on a result from the test for the distinctive signature characteristic of the processing agent.

23.   (New)   A method according to claim 22, wherein the step of selectively modifying subsequent operation of the processing system comprises at least partially disabling output of the process result in the absence of the distinctive signature characteristic.

24.   (New)   A method according to claim 22, wherein the processing agent comprises a first component for providing the primary behavior and a second component having the distinctive signature characteristic.

25.   (New)   A method according to claim 22 wherein the distinctive signature characteristic is in the behavior of the processing agent in the subject, and wherein the subject is a human being.

26.   (New)   A method according to claim 25 wherein the distinctive signature characteristic is in a time-dependent behavior of the processing agent in the subject.

27.   (New)   A method according to claim 25 wherein the distinctive signature characteristic is in a spatially-dependent behavior of the processing agent in the subject.

28.   (New)   A method according to claim 22 wherein the distinctive signature characteristic is a property of the processing agent detectable by the processing system.

29.   (New)   A method according to claim 22 wherein the processing system comprises an analysis apparatus, the processing agent comprises an analysis agent, the analysis agent being administered to the subject and having in relation thereto a primary behavior effective to reveal upon analysis by the analysis apparatus a condition of the subject as the process result.

30.   (New)   An analysis system according to claim 29 wherein the distinctive signature characteristic is a property of the processing agent detectable by the analysis apparatus on analysis of the primary behavior of the analysis agent.

31.   (New)   An analysis system according to claim 29 wherein the analysis apparatus is a medical imaging apparatus and the analysis agent comprises a contrast agent.

32.   (New)   An analysis system according to claim 31 wherein the analysis agent comprises two radio isotopes of different decay characteristics to provide the distinctive signature characteristic.

33.   (New)   An analysis system according to claim 31 wherein the analysis agent comprises a component emitting photons of a particular energy to provide the distinctive signature characteristic.

34.   (New)   An analysis system according to claim 31 wherein the distinctive signature characteristic is a magnetic resonance spectrum of the contrast agent.

35.   (New)   An analysis system according to claim 31 wherein the analysis agent comprises the contrast agent and a further component having a distinctive magnetic resonance spectrum to provide the distinctive signature characteristic.

36.   (New)   A method according to claim 22 wherein the processing subject is *in vitro*.

37.   (New)   A computer program comprising program code for providing test functionality on a programmed data processor for use in carrying out the method of claim 22.

38.   (New)   A computer program according to claim 37 further comprising program code for controlling the processing system to achieve the desired process result.

39.   (New)   A processing agent for use in carrying out the method of claim 22 and having in relation to a predetermined subject a primary behavior effective in combination with the processing system to achieve a desired process result, and further having a distinctive signature characteristic distinguishing it from other processing agents and distinguishable by the test functionality.